

NOAA Climate Science & Services

Monthly Climate Update

A look back at June and a preview of August through October

Jake Crouch

Climatologist

NOAA's National Climatic Data Center

Chris Fuhrmann

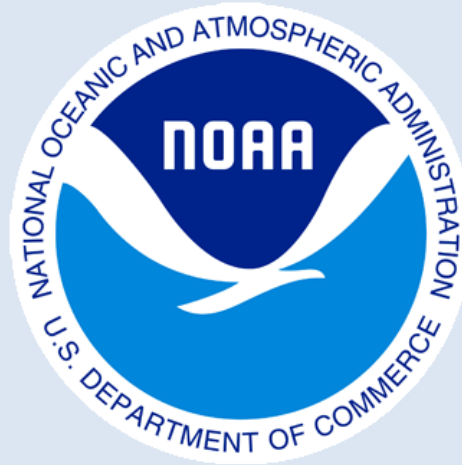
Regional Climatologist

Southeast Regional Climate Center

Dan Collins

Seasonal Forecaster

NOAA's Climate Prediction Center



Global Climate Highlights - June

June Global Temperatures:

- 1.15°F above the 20th century average
- Ties 2006 as 5th warmest June on record
- Land: 3rd warmest (+1.89°F)
- Ocean: 10th warmest (+0.86°F)

National June Information:

- Spain has coolest June since 1997
- UK temperatures slightly below average, but warmest June since 2010
- Japan temperatures 0.5°F to 2.5°F above average

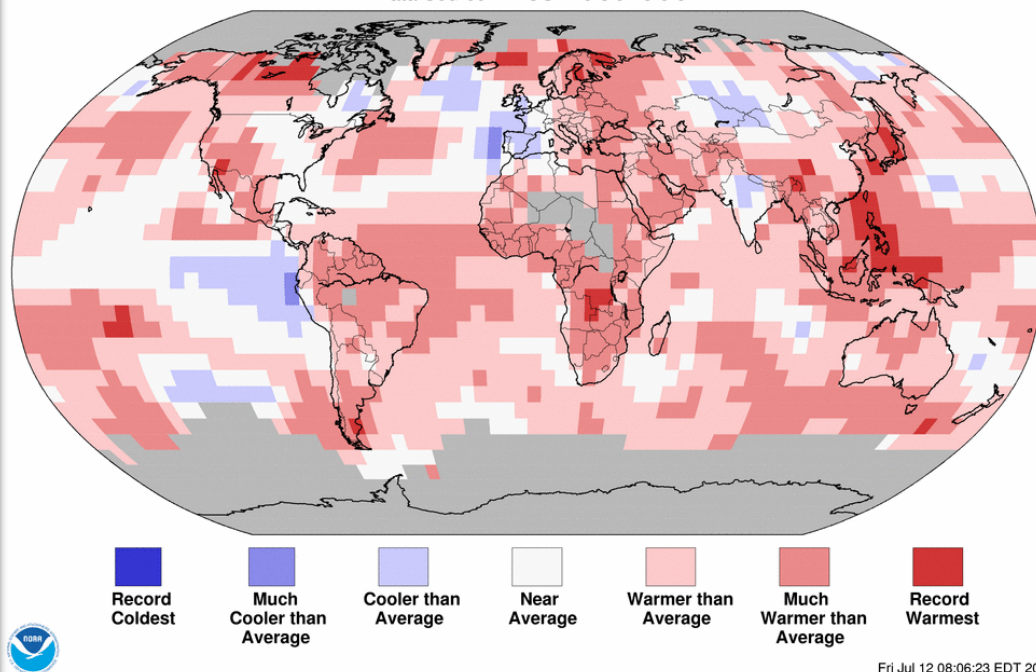
January-June Global Temperatures:

- 1.06°F above the 20th century average
- Ties 2003 as 7th warmest year to date period
- Land: 6th warmest (+1.80°F)
- Ocean: 7th warmest (+0.79°F)

Land & Ocean Temperature Percentiles Jun 2013

NOAA's National Climatic Data Center

Data Source: MLOST version 3.5.3



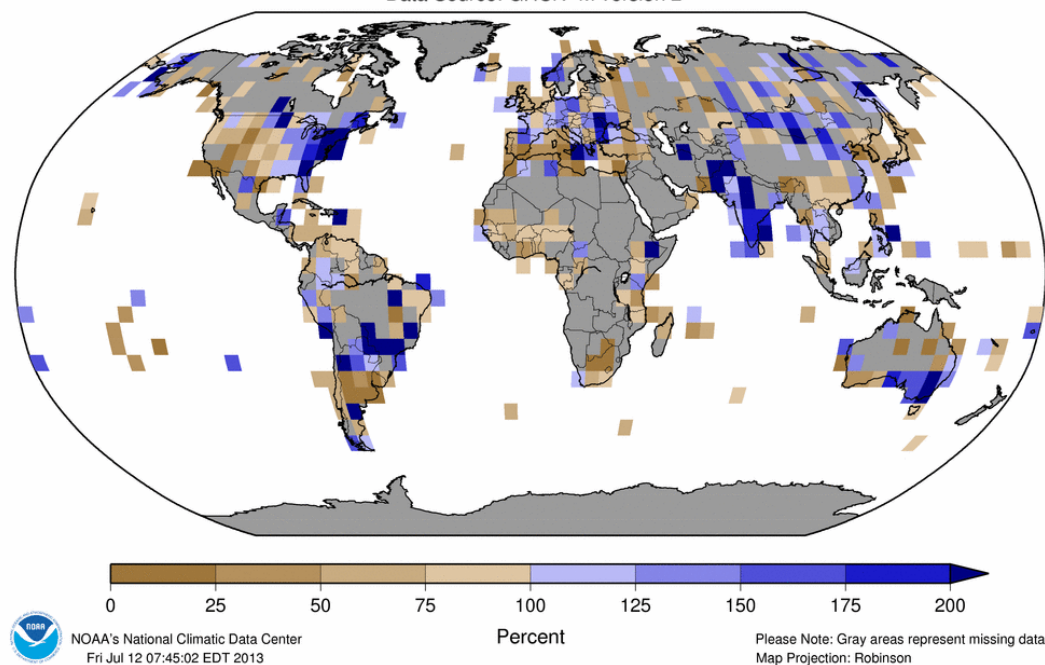
Fri Jul 12 08:06:23 EDT 2013



Global Climate Highlights - June

Land-Only Precipitation Percent of Normal Jun 2013
(with respect to a 1961–1990 base period)

Data Source: GHCN-M version 2



National June Precipitation Information:

- Regions of New Zealand were record wet, with two to four times the average rainfall in some locations
- Marshall Islands drier than average, continuing the pattern for most of 2013. Significant drought and water resource issues impacting the islands
- Northern Austria wet, many places, including Vienna were record wet
- Norway has 4th wettest June on record
- Heavy monsoon rains in northwestern India cause significant damage and loss of life. Nearly twice the average monthly precipitation was observed in this region, with locally heavier amounts

U.S. Climate Highlights - June

Warmer and wetter than average nationally

Drought continues for 46.1% of contiguous United States

Temperature: 2.0°F above average – 15th warmest

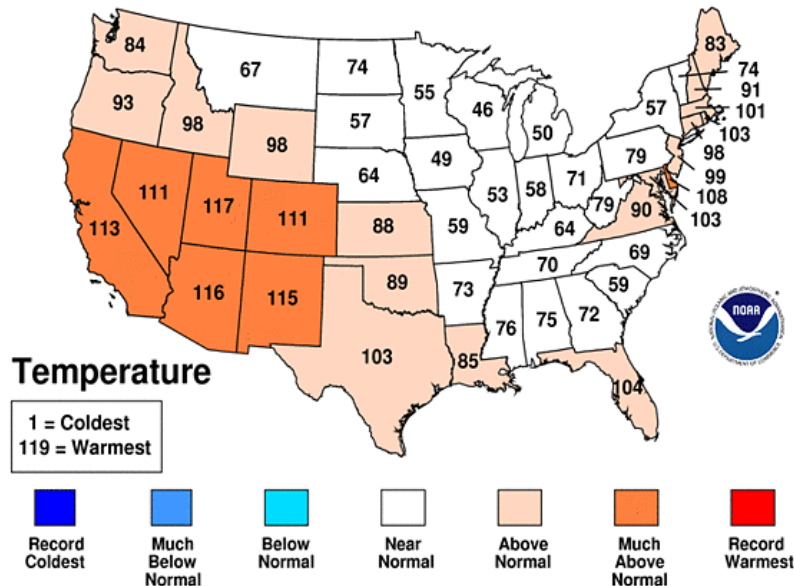
- **Warm:** Northeast and Mid-Atlantic. West – AZ, CA, CO, NM, NV, UT top ten warm.
- **Near-Average:** Northern Plains, Midwest, Southeast.

Precipitation: 0.54" above average – 13th wettest

- **Wet:** East Coast and Midwest. DE, NJ record wet and 16 additional states top ten wet.
- **Dry:** West. UT record dry, AZ, CO, WY top ten dry.

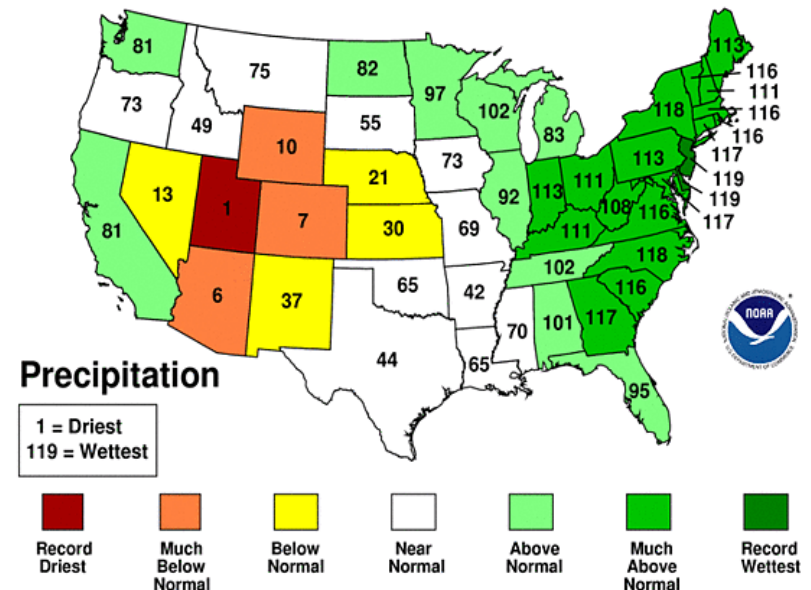
June 2013 Statewide Ranks

National Climatic Data Center/NESDIS/NOAA



June 2013 Statewide Ranks

National Climatic Data Center/NESDIS/NOAA



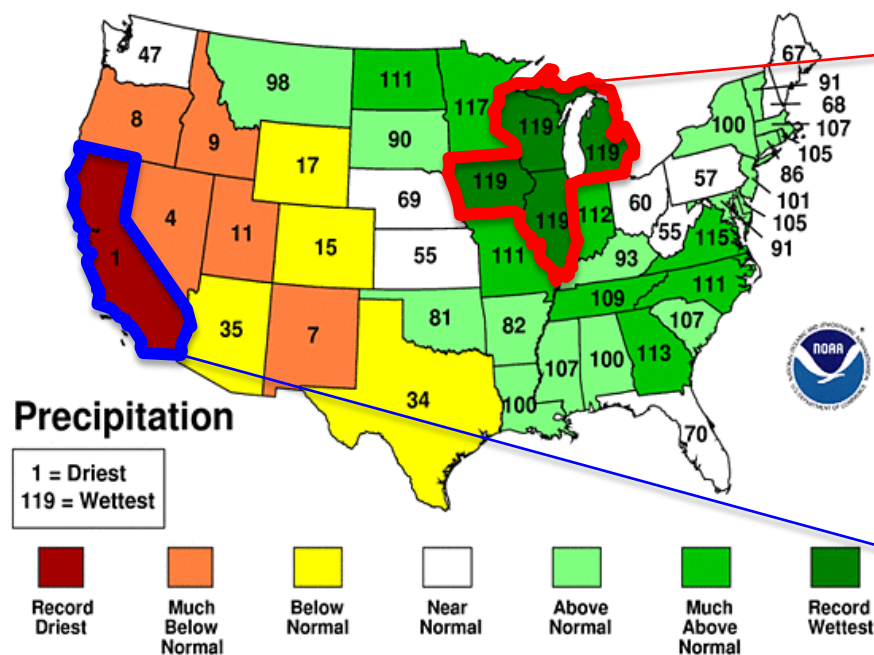
U.S. Climate Highlights – Year-to-Date

Year-to-Date Precipitation: 0.87" above average

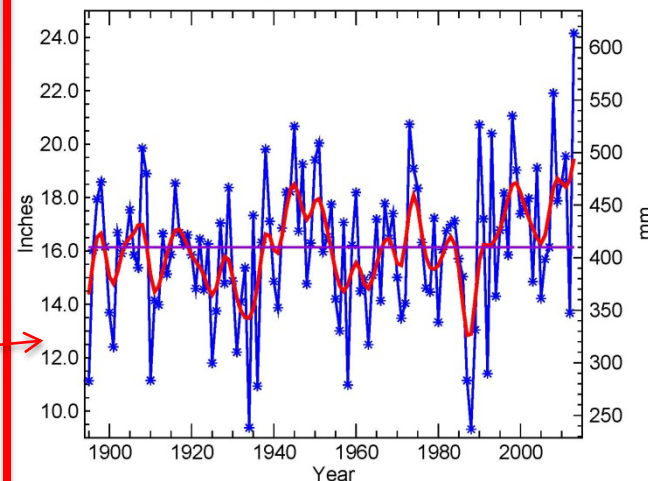
- **Wet:** East Coast, Midwest, N. Plains – IA, IL, MI, WI record wet.
- **Dry:** CA record dry, only 31% of average precipitation.

January-June 2013 Statewide Ranks

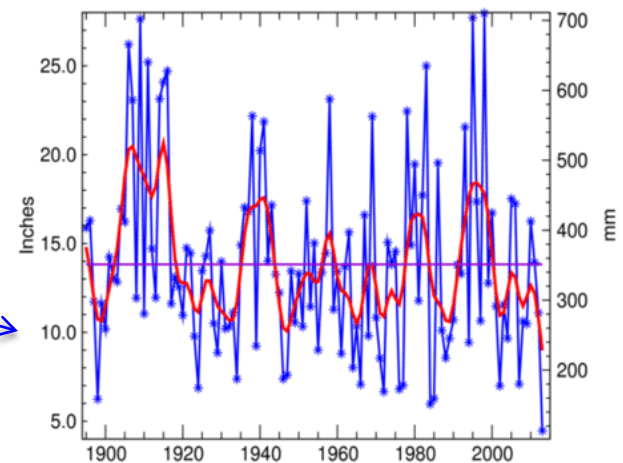
National Climatic Data Center/NESDIS/NOAA



IA-IL-MI-WI Precipitation
January-June, 1895-2013



California Statewide Precipitation
January - June, 1895 - 2013

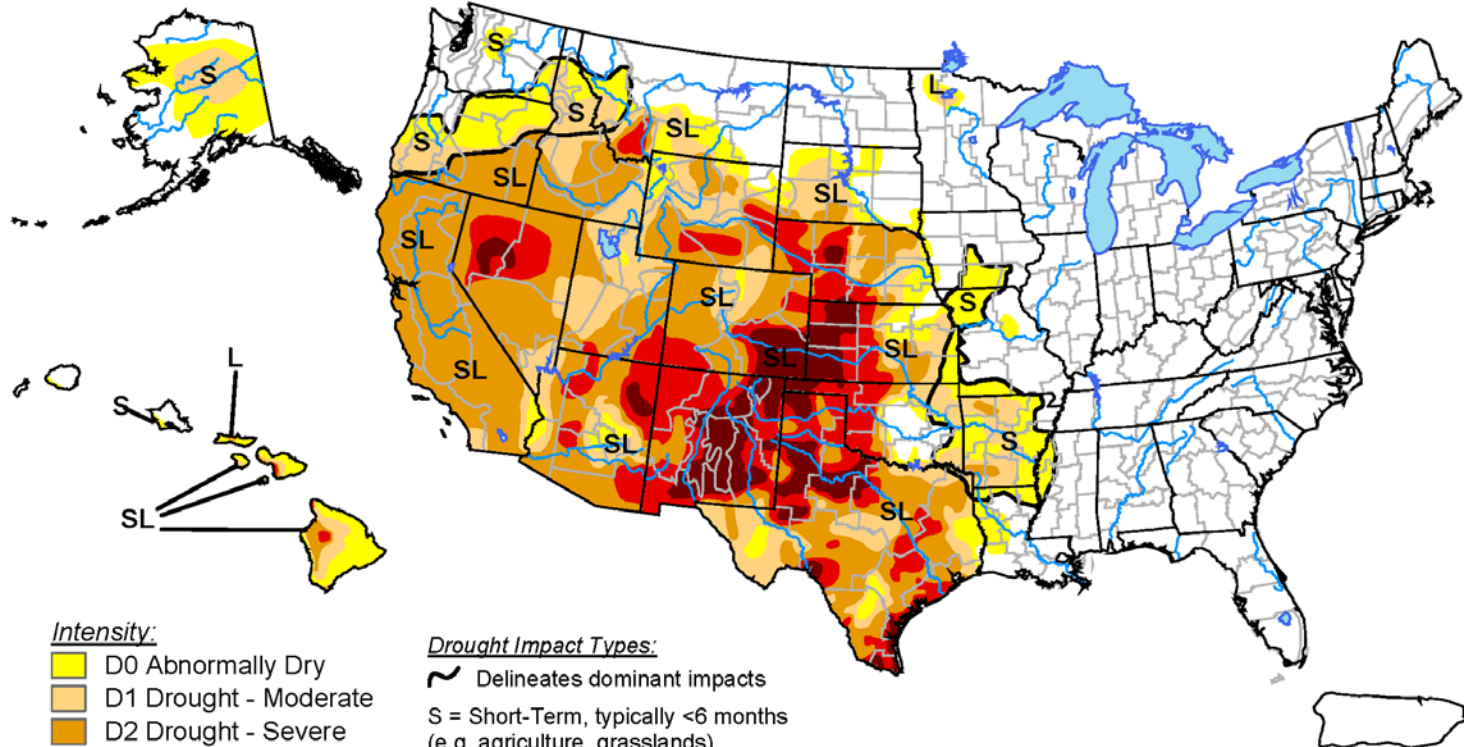


U.S. Drought Monitor

U.S. Drought Monitor

July 16, 2013

Valid 7 a.m. EDT



Intensity:

- D0 Abnormally Dry
- D1 Drought - Moderate
- D2 Drought - Severe
- D3 Drought - Extreme
- D4 Drought - Exceptional

Drought Impact Types:

- Delineates dominant impacts
- S = Short-Term, typically <6 months
(e.g. agriculture, grasslands)
- L = Long-Term, typically >6 months
(e.g. hydrology, ecology)

The Drought Monitor focuses on broad-scale conditions.
Local conditions may vary. See accompanying text summary
for forecast statements.

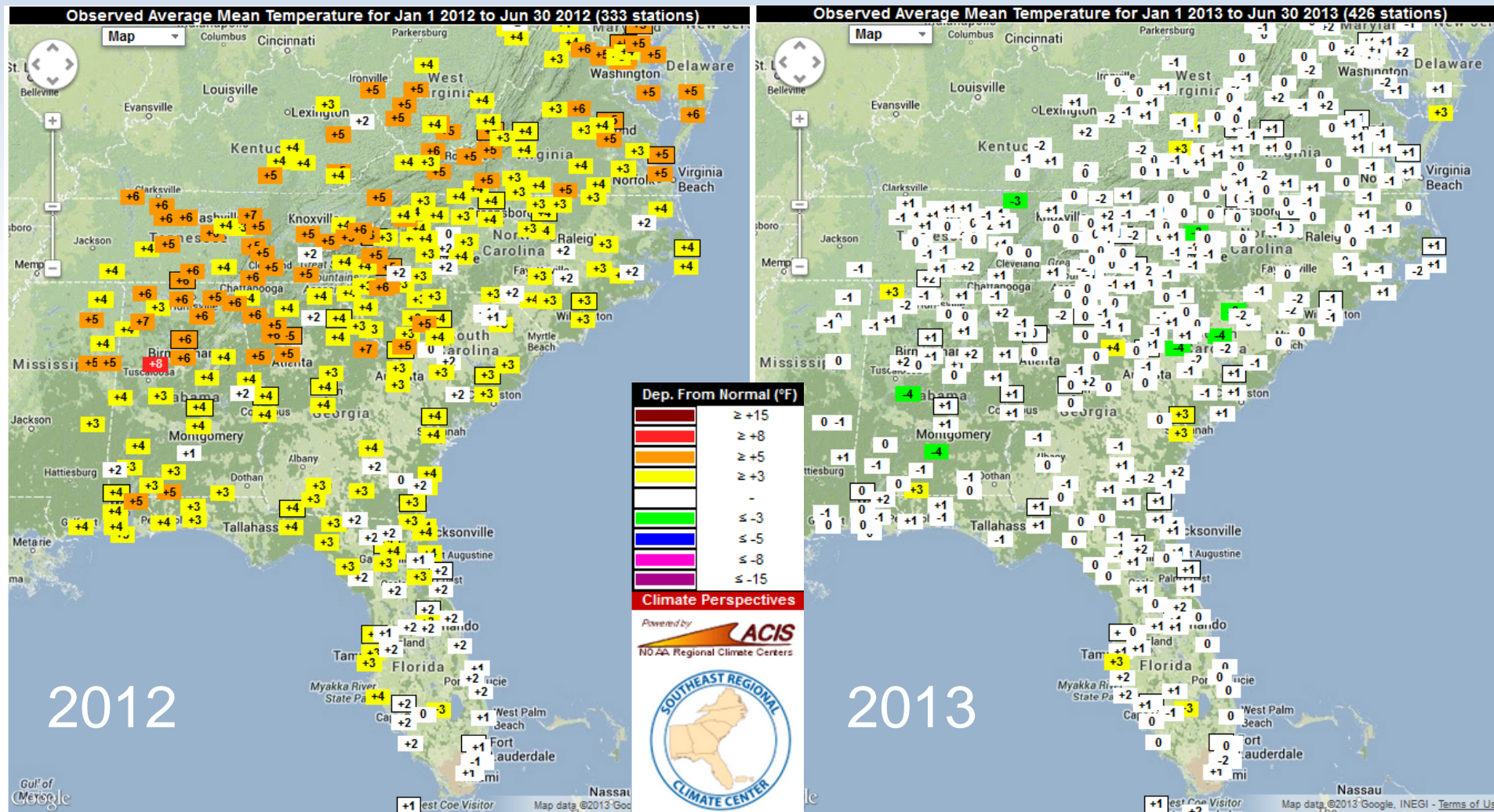
<http://droughtmonitor.unl.edu/>



Released Thursday, July 18, 2013
Author: Richard Heim, NOAA/NESDIS/NCDC

Southeast Regional Highlights

Year-to-Date (June 30) Temperature Departures: 2012 vs. 2013



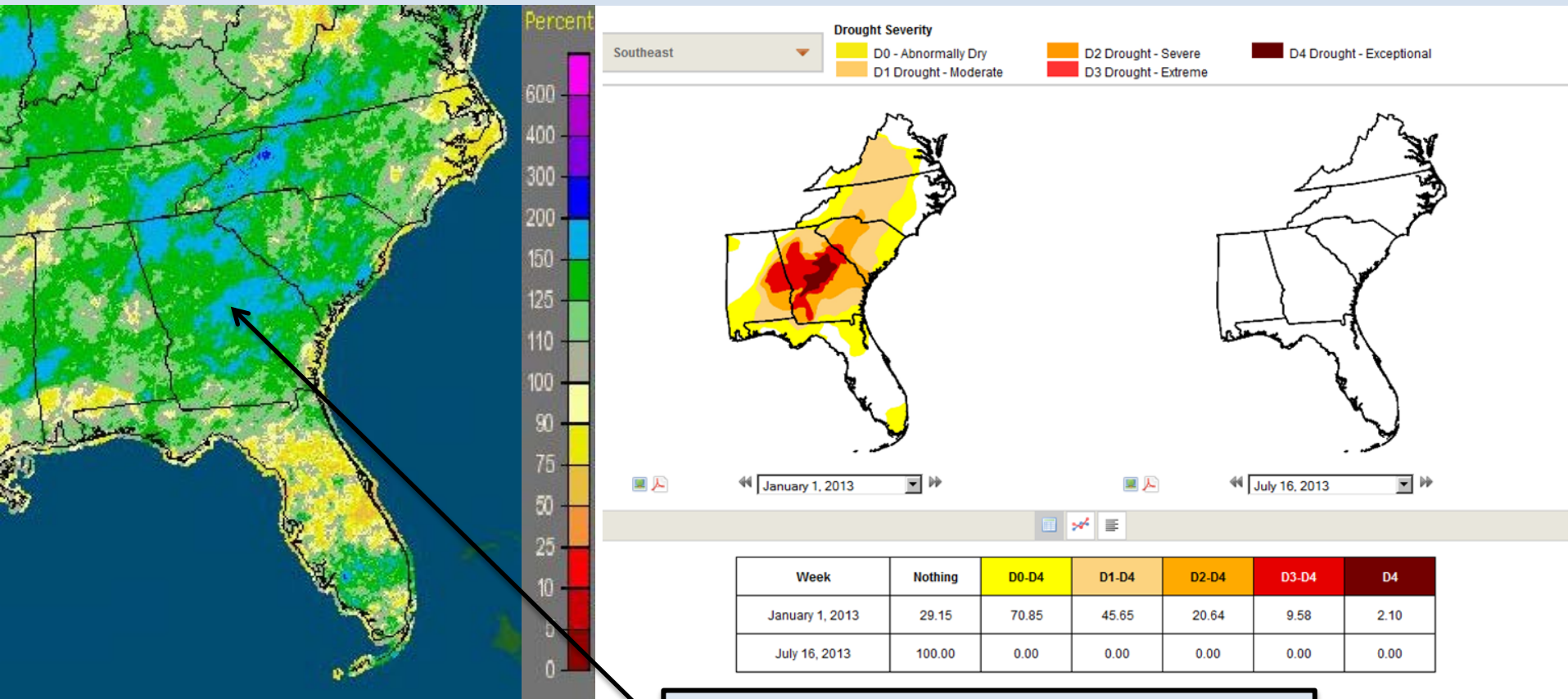
*Maps developed using our Climate Perspectives tool:
<http://www.sercc.com/perspectives>

July 18, 2013

Monthly Climate Webinar

Southeast Regional Highlights

Year-to-Date Precipitation Anomalies & Impact on Drought Monitor

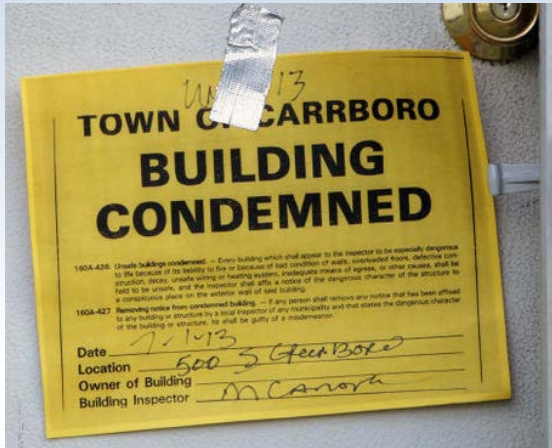


Macon, GA: Year-to-Date Precipitation

- 2013: 40.92" (*wettest start to year*)
- 2012: 13.74" (Annual total 32.41")

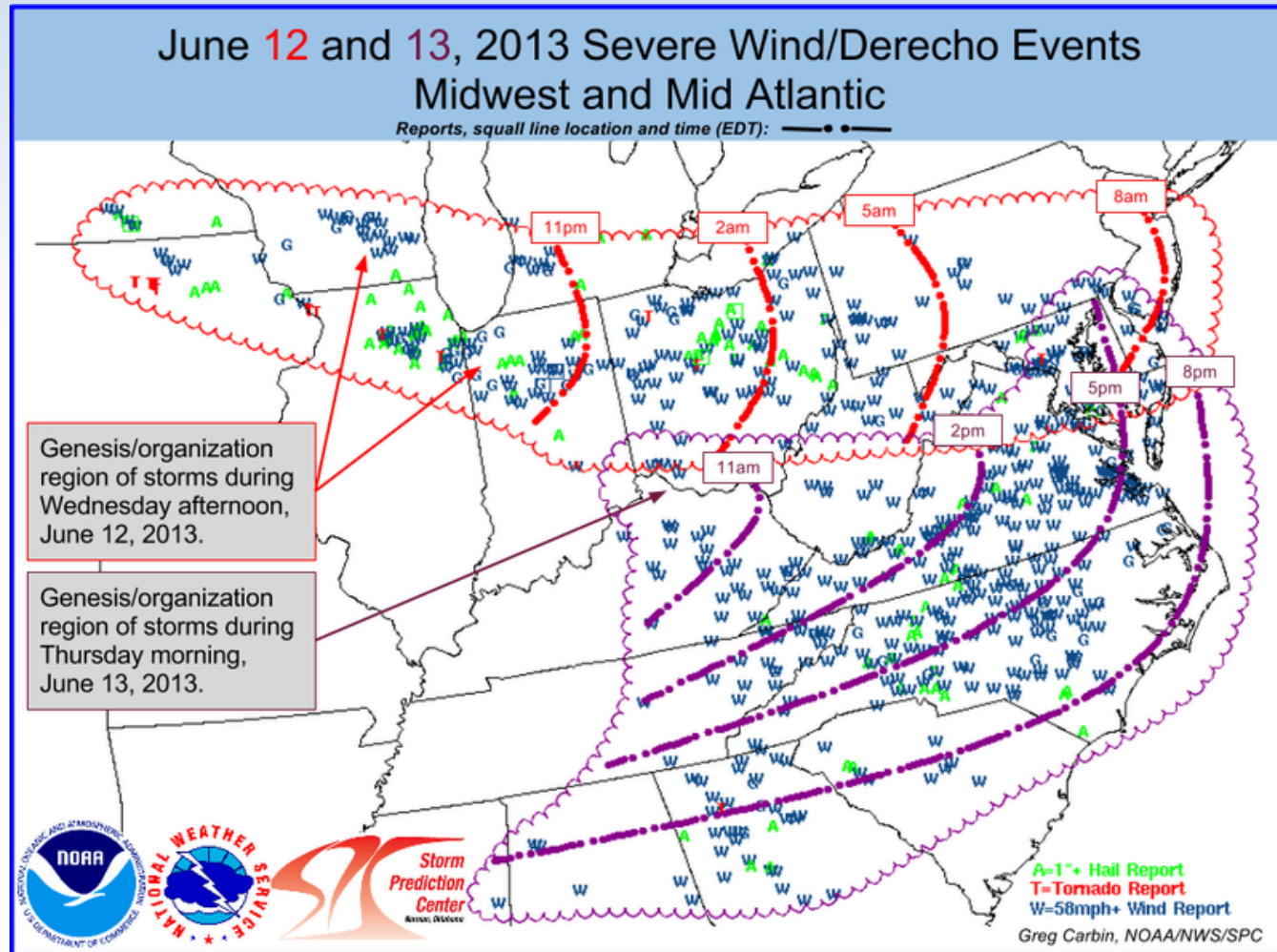
Southeast Regional Highlights

Many Impacts From Heavy Rainfall and Flooding...



Southeast Regional Highlights

Second Consecutive June With Severe Wind/Derecho in Southeast

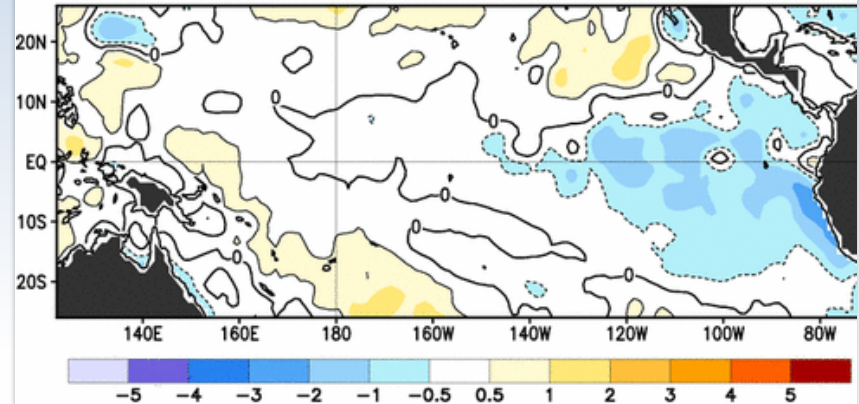


El Niño/La Niña Southern Oscillation (ENSO)

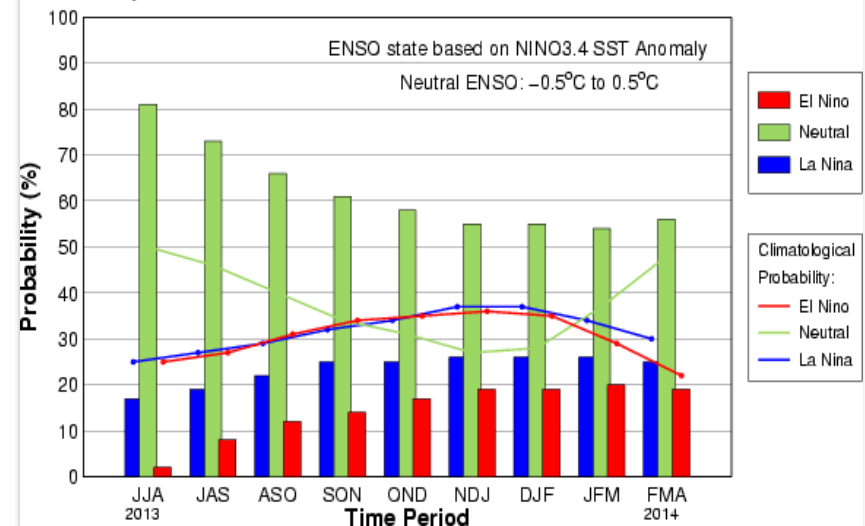
Sea Surface Temperature Update

- Differences from normal temperatures are small in the western and central Pacific
- Cooler than normal water has expanded in the eastern Pacific
- ENSO-neutral conditions continue
- The current ENSO-neutral state is likely to continue into at least the autumn of 2013

Average SST Anomalies
July 7 2013 – July 13 2013

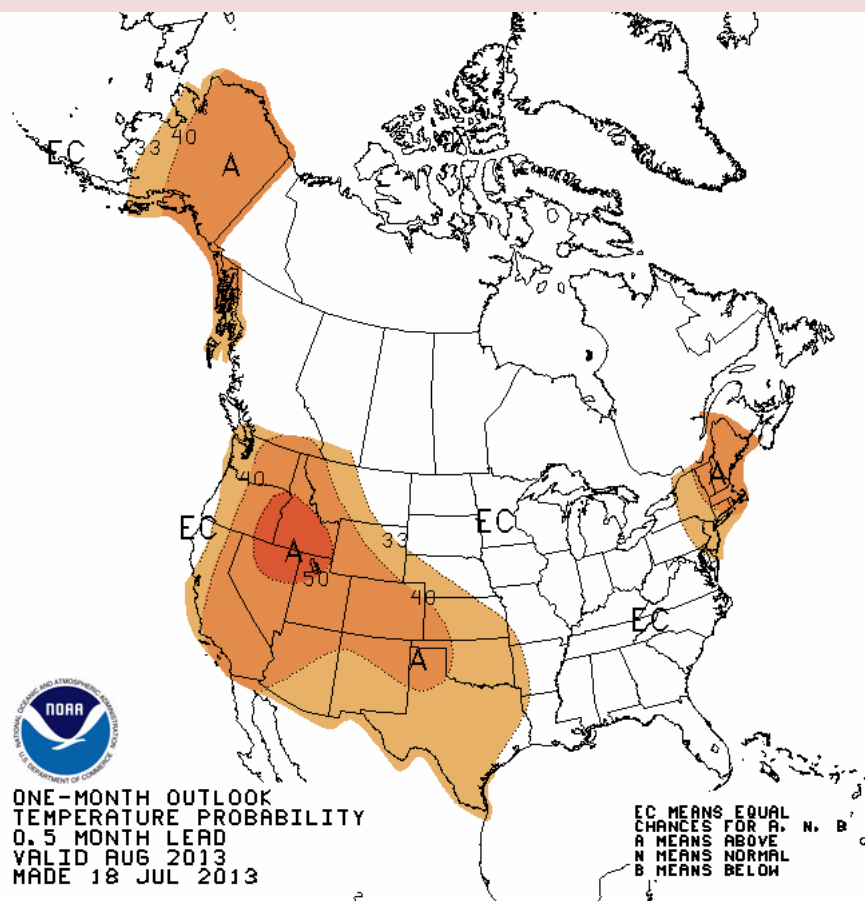


Early-Jul CPC/IRI Consensus Probabilistic ENSO Forecast

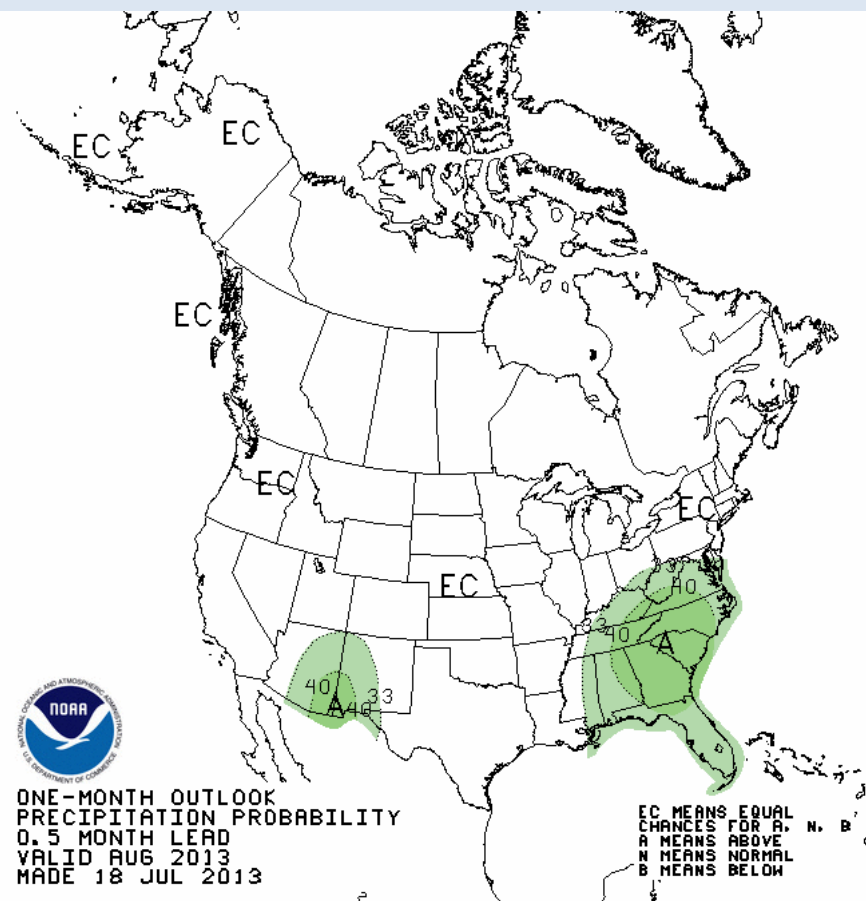


Monthly Forecast: August

August Average Temperature Probability

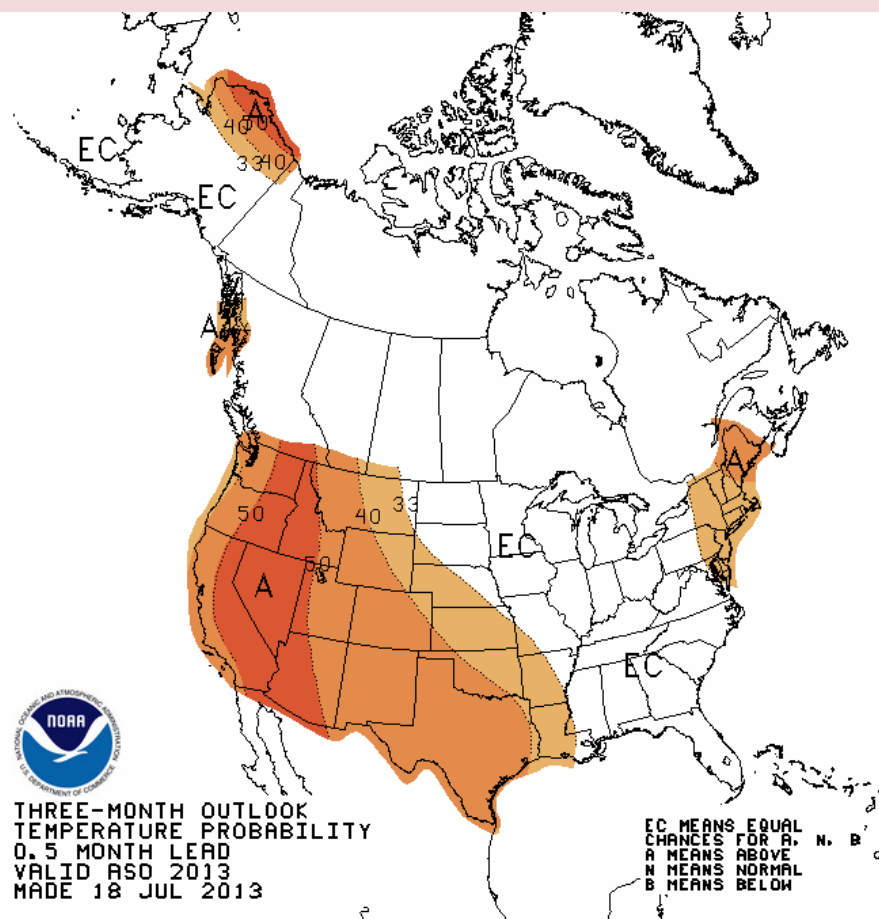


August Total Precipitation Probability

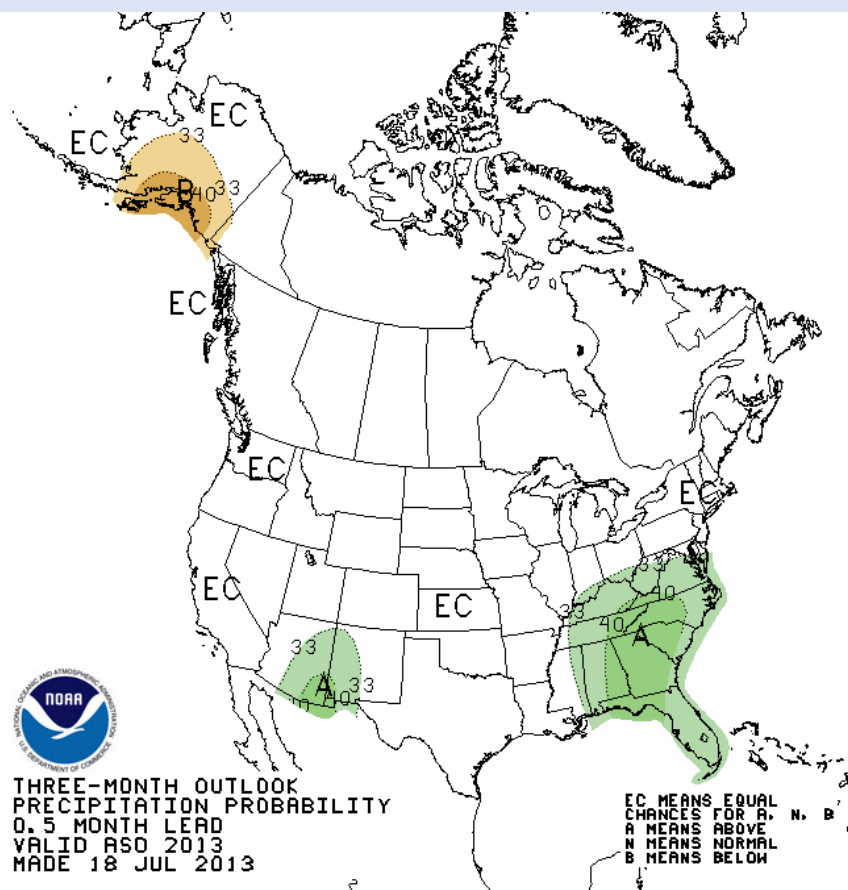


Seasonal Forecast: Aug-Sept-Oct

Aug-Sep-Oct Average Temperature Probability

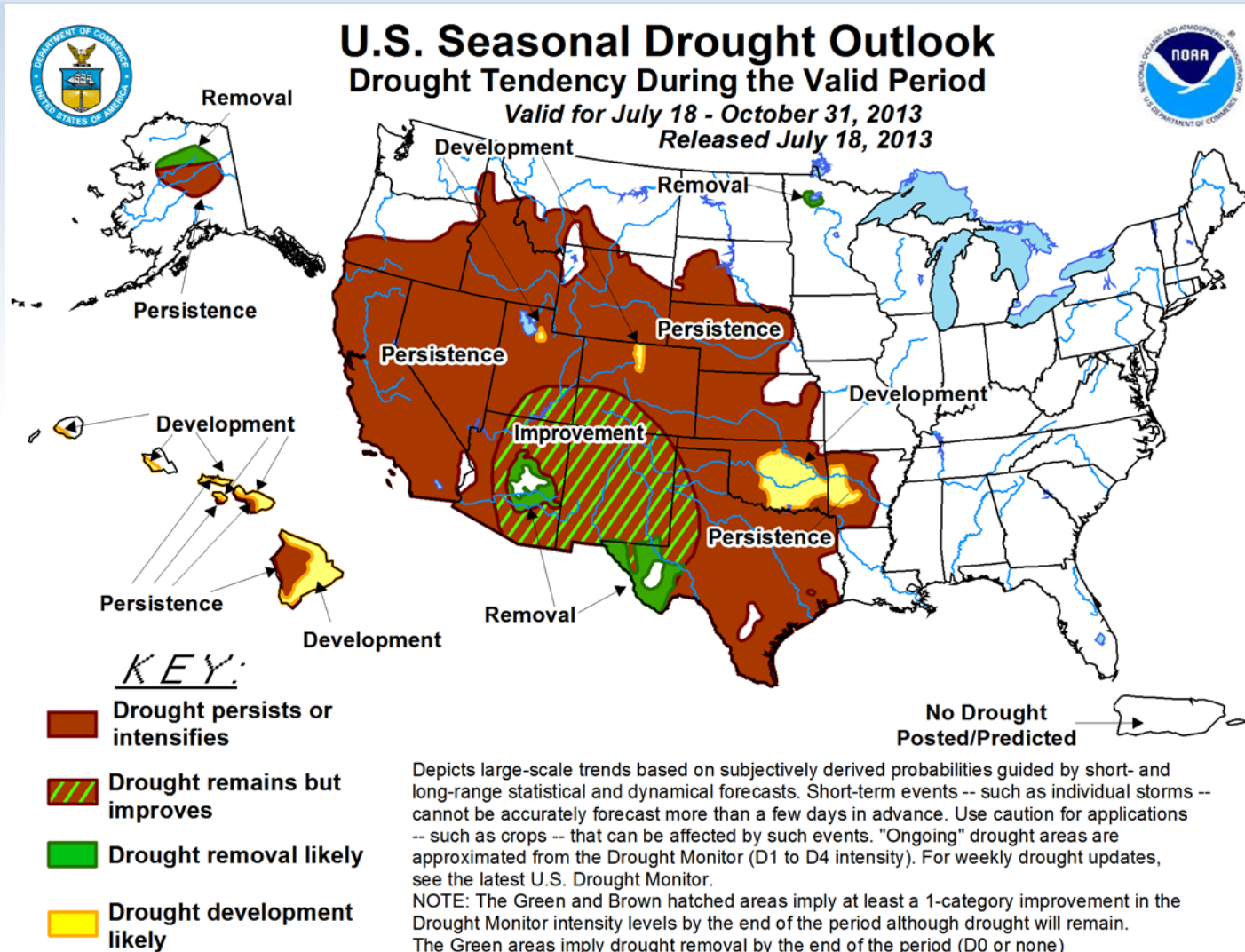


Aug-Sep-Oct Total Precipitation Probability

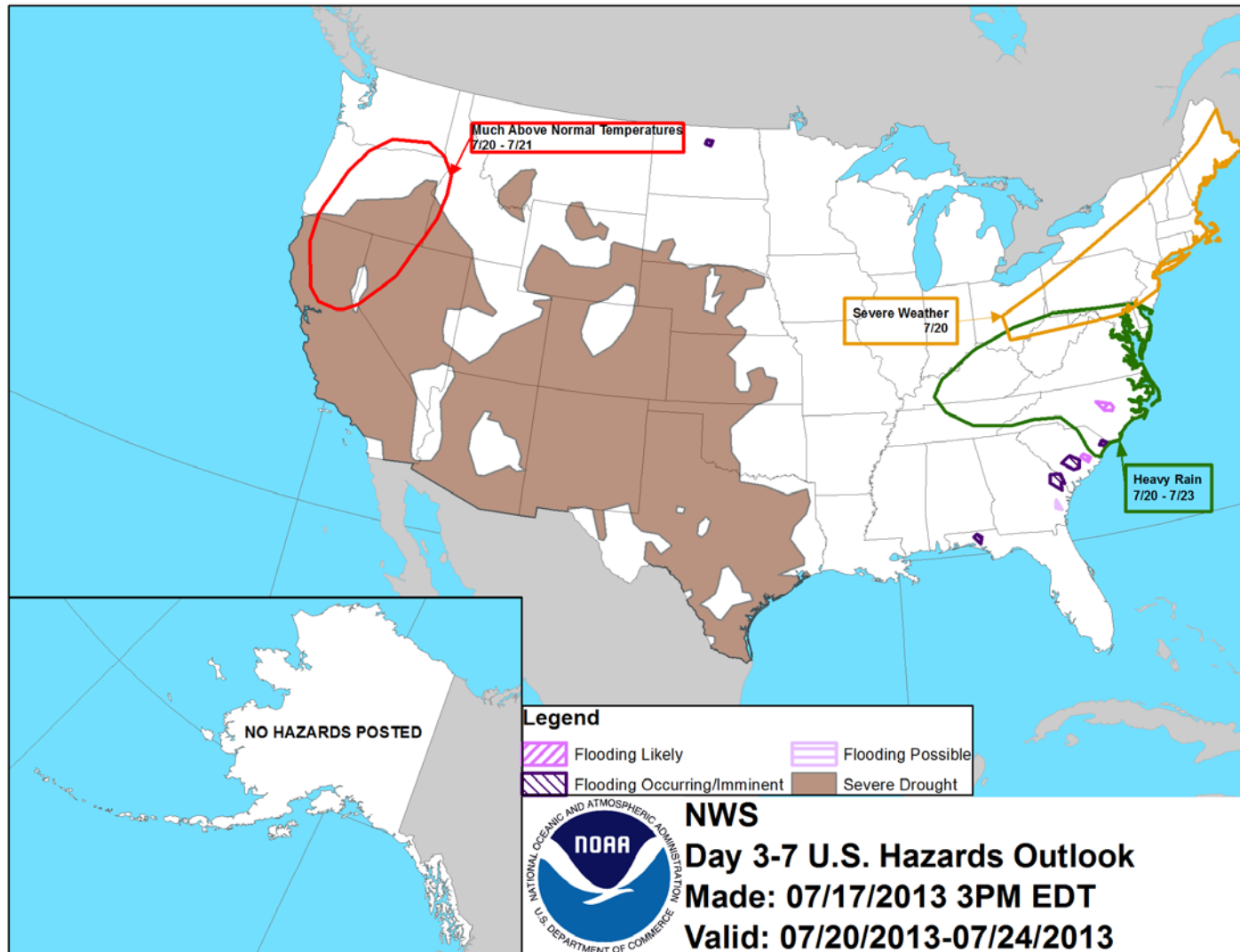


U.S. Drought Outlook

Monthly and 3-month forecast



U.S. Hazards Outlook



For More Information



Today's Presentation:

- <http://www.ncdc.noaa.gov/sotc/briefings>

NOAA's National Climatic Data Center: www.ncdc.noaa.gov

- Monthly climate reports (U.S. & Global): www.ncdc.noaa.gov/sotc/

NOAA's Climate Prediction Center: www.cpc.ncep.noaa.gov

Southeast Regional Climate Center: <http://www.sercc.com/>

U.S. Drought Monitor: <http://drought.gov>

Climate Portal: www.climate.gov

Media Contacts:

- Brady.Phillips@noaa.gov, 202-407-1298 (NOAA/Comms)
- Katy.Vincent@noaa.gov, 828-257-3136 (NOAA/NCDC)